CLAIMS

What is claimed is:

1. A foot-operated control console to allow an operator to control a plurality of medical devices during a medical procedure, the foot-operated control console comprising:

a plurality of controls designed to be operated by a foot of the operator; and

a set of wireless transmitters that includes at least one wireless transmitter, to transmit a first plurality of control signals over a wireless medium to control the plurality of medical devices during the medical procedure in response to inputs from the plurality of controls.

2. A foot-operated control console as recited in claim 1, further comprising a controller to receive the inputs from the plurality of controls and to provide the first plurality of control signals to the at least one wireless transmitter.

3. A foot-operated control console as recited in claim 1, wherein the plurality of controls includes a selection control to allow the operator to select a device to be controlled from among the plurality of medical devices.

4. A foot-operated control console as recited in claim 3, further comprising a receiver unit to receive a selection signal based on operation of the selection control and the first plurality of control signals via the wireless medium, and to control the selected device in response to the selection signal and the first plurality of control signals.

5. A foot-operated control console as recited in claim 4, wherein the receiver unit further is to control the selected device via a wired communication medium in response to the selection signal and the first plurality of control signals.

6. A foot-operated control console as recited in claim 5, wherein the receiver unit includes:

a wireless receiver to receive the selection signal and the first plurality of control signals via the wireless medium;

a data communication device to transmit a second plurality of control signals to the selected device over the wired communication medium, based on the first plurality of control signals and the selection signal; and

a controller to control the data communication device in response to the first plurality of control signals and the selection signal, including generating the second plurality of control signals based on the first plurality of control signals so that the second plurality of control signals are compatible with the selected device, as indicated by the selection signal.

7. A foot-operated control console as recited in claim 1, further comprising an internal rechargeable power source to power the foot-operated control console.

8. A foot-operated control console as recited in claim 7, further comprising:

an induction element; and

a charging circuit to control charging of the power source by power induced in the induction element by an external source.

9. A foot-operated control console as recited in claim 1, wherein the plurality of controls includes a foot pedal and a foot switch.

10. A foot-operated control console as recited in claim 1, wherein the plurality of controls includes a plurality of foot pedals and a plurality of foot switches.

11. A foot-operated control console as recited in claim 1, wherein the console transmits a device identifier identifying the console in association with the control signals, the device identifier for associating the foot-operated control console with a corresponding wireless receiver.

12. A foot-operated control console as recited in claim 1, further comprising a housing to contain the set of wireless transmitters, the housing having an attachment to allow a suction hose to be attached to the housing.

13. A foot-operated control console to allow an operator to control a plurality of medical devices during a medical procedure, the foot-operated control console comprising:

a plurality of controls designed to be operated by a foot of the operator;

means for transmitting a first plurality of control signals over a wireless medium to control the plurality of medical devices in response to operation of the plurality of controls; and

means for controlling the wireless transmitter in response to operation of the controls.

14. A system to allow an operator to control a plurality of medical devices during an endoscopic medical procedure, the system comprising:

a foot-operated control console to allow an operator to control the plurality of medical devices, the foot-operated control console including

a plurality of controls for operation by a foot of the operator, the plurality of controls including a selection control to allow the operator to select a device to be controlled from among the plurality of medical devices;

a wireless transmitter to transmit over a wireless medium a selection signal responsive to operation of the selection control and a first plurality of control signals responsive to operation of the plurality of controls;

a first controller to control the wireless transmitter in response to operation of the plurality of controls.

15. A system as recited in claim 14, wherein the system further includes a receiver unit, including:

a wireless receiver to receive the selection signal and the first plurality of control signals via the wireless medium;

a data communication device to transmit a second plurality of control signals to the selected device over a wired communication medium, based on the first plurality of control signals and the selection signal; and

a second controller to control the data communication device in response to the first plurality of control signals and the selection signal, including generating the second plurality of control signals based on the first plurality of control signals so that the

second plurality of control signals are compatible with the selected device, as indicated by the selection signal.

16. A system as recited in claim 15, wherein the foot-operated control console further includes:

a battery sealed within the foot-operated control console, to power the foot-operated control console;

an induction element; and

a charging circuit to control charging of the battery by power electromagnetically induced in the induction element.

17. A system as recited in claim 16, wherein the system further comprises a charging station including:

a receptacle to receive the foot-operated control console; and

an induction coil, coupled to a power supply, to cause the battery in the foot-operated control console to be charged inductively when the foot-operated control console is in the receptacle.

18. A system as recited in claim 17, wherein the system further comprises a docking station that includes a receptacle to physically couple to the foot-operated control console.

19. A system as recited in claim 18, wherein the charging station is an element of the docking station.

20. A system as recited in claim 18, wherein the charging station is retractably coupled to the docking station.

21. A system as recited in claim 18, wherein the receiver unit is contained within the docking station.

22. A system as recited in claim 15, wherein the foot-operated control console further includes a removable battery to power the foot-operated control console; and

wherein the system further comprises a charger to receive and charge the battery when the battery is removed from the foot-operated control console.

23. A system as recited in claim 15, wherein the plurality of controls includes a foot pedal and a foot switch.

24. A system as recited in claim 15, wherein the plurality of controls includes a plurality of foot pedals and a plurality of foot switches.

25. A system as recited in claim 15, wherein the first controller is configured to cause the wireless transmitter to transmit a device identifier in association with the first plurality of control signals, the device identifier for associating the foot-operated control console with the receiver unit.

26. A system as recited in claim 14, wherein the foot-operated control console further comprises a housing to contain the wireless transmitter and the first controller, the housing having an attachment to allow a suction hose to be attached to the housing.

27. An apparatus to allow an operator to control a plurality of medical devices during an endoscopic medical procedure, the apparatus comprising:

a housing designed to be situated on a floor surface of an area in which the endoscopic medical procedure is performed during the endoscopic medical procedure;

a plurality of controls within the housing, designed to be operated by a foot of the operator to control the plurality of medical devices, the plurality of controls including a plurality of foot pedals and a plurality of foot switches, the plurality of foot switches including a selection switch to allow the operator to select a device to be controlled from among the plurality of medical devices;

a wireless transmitter within the housing, to transmit over a wireless medium a selection signal to cause a remote receiver unit to select the device to be controlled and a first plurality of control signals to cause the remote receiver unit to control the selected device in response to operation of the controls;

a rechargeable battery within the housing, to power the foot-operated control console;

an induction coil within the housing; and

a charging circuit within the housing, coupled to the battery and the induction coil, to control charging of the battery by power induced in the induction coil by a source outside the housing.

28. An apparatus as recited in claim 27, further comprising a controller within the housing, to control the wireless transmitter in response to operation of the controls, and to cause the wireless transmitter to transmit a device identifier in association with the

control signals, the device identifier for uniquely associating the apparatus with the receiver unit.

29. An apparatus as recited in claim 27, wherein the apparatus further includes the receiver unit, and wherein the receiver unit includes:

a wireless receiver to receive the selection signal and the first plurality of control signals via the wireless medium;

a data communication device to transmit a second plurality of control signals to the selected device over a wired communication medium, based on the first plurality of control signals and the selection signal; and

a second controller to control the data communication device in response to the first plurality of control signals and the selection signal, including generating the second plurality of control signals based on the first plurality of control signals so that the second plurality of control signals are compatible with the selected device, as indicated by the selection signal.

30. An apparatus as recited in claim 27, wherein the housing has an attachment to allow a suction hose to be attached to the housing.